



# Best Management Practices for Construction and Development Projects Sicklefin Chub *Macrhybopsis meeki*

**Common name** • Sicklefin chub

**Scientific name** • *Macrhybopsis meeki*

**Federal status** • None

**State status** • None

## Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended as a guide to manage habitat for a given species. Please contact the Department of Conservation if habitat management information is needed. Because every project and location differ, following the recommendations in this document does not guarantee impacts will not occur to the species and additional information may be required in certain instances. Following the recommendations in this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

## Ecology

The sicklefin chub is restricted to the Missouri River and the Mississippi River downstream of the confluence of these two rivers. It inhabits the main channels of these large, turbid rivers where it lives in a strong current over a substrate of sand or fine gravel. Sicklefin chubs are likely bottom feeders and locate food by external taste buds on the body, as well as by sorting through food taken off the river bottom. Spawning occurs in the spring, likely between late March and May. Adult sicklefin chubs are typically 2.4-4.0 inches in length.

## Reasons for Decline

Surveys conducted during the 1940s showed that the sicklefin chub was not very common in Missouri. Since then, the population has become steady in the Missouri River below the mouth of the Gasconade River and has been found in the Middle Mississippi River in higher numbers than indicated by past records. However, this may be due to increased efficiency in sampling for this species. The sicklefin chub has declined because the number and area of sand and gravel shoals and bars have been eliminated by channel training activities. These areas are especially important for young-of-the-year fish. Changed natural flow regimen and reduced turbidity caused by Missouri River mainstream reservoirs have degraded sicklefin chub habitat. Other negative

factors likely include non-point source pollution and degradation of riparian areas.

## Specific Recommendations

Missouri contains one of the best populations of sicklefin chub in its historical range. It is important to protect shoals and sand bar habitat to help ensure the survival of this species.

- Project activities should not occur below water levels between March 1 and July 31 and should avoid main channel areas.
- Practices that will increase siltation or erosion should be avoided.
- Channelization and impoundments should be avoided in areas where there is available habitat for sicklefin chubs.

## General Recommendations

Refer to *Best Management Practices for Construction and Development Projects Affecting Missouri Rivers and Streams*.

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or the [Missouri Department of Transportation Environmental Studies webpage](#) for additional information on recommendations.

## Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

For species information:

### [Missouri Department of Conservation](#)

Science Branch  
P.O. Box 180  
Jefferson City, MO 65102-0180  
Telephone: 573-751-4115

For species information and Endangered Species Act Coordination:

### [U.S. Fish and Wildlife Service](#)

Ecological Services  
101 Park Deville Drive, Suite A  
Columbia, MO 65203-0007  
Telephone: 573-234-2132

For Clean Water Act Coordination:

[Missouri Department of Natural Resources](#)

Water Protection Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 573-751-1300, 800-361-4827

[U.S. Army Corps of Engineers](#)

Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816-389-3990

[U.S. Environmental Protection Agency](#)

EPA Region 7 Water Division  
11201 Renner Boulevard  
Lenexa, KS 66219  
Telephone: 913-551-7977

## **Disclaimer**

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors, and others to provide guidance to those who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Federal laws such as the Clean Water Act and the Endangered Species Act, and state or Local laws need to be considered for construction and development projects and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.